REMARKS

In the Office Action mailed from the United States Patent and Trademark Office on April 19, 2007, the Examiner objected to claim 34, rejected claim 6 under 35 U.S.C. 101, rejected claims 1-6, 8-10, 14-19, 22-23, 25, 27-29, 31, 33-43, 48, 50-52, 58-59 and 61-69 under 35 U.S.C. 103(a) as being unpatentable over Parry et al (United States Patent No. 6,077,085, hereinafter "Parry") in view of Krebs (United States Patent No. 7,029,280, hereinafter "Krebs"), rejected claims 12, 53-55 and 57 under 35 U.S.C. 103(a) as being unpatentable over Parry in view of Krebs and further in view of Rukavina et al (United States Patent Application Publication No. 2002/0188583, hereinafter "Rukavina"), rejected claims 24, 26, 60, and 70 under 35 U.S.C. 103(a) as being unpatentable over Parry in view of Krebs and further in view of Kershaw et al (United States Patent No. 5,565,316, hereinafter "Kershaw"), rejected claims 30 and 49 under 35 U.S.C. 103(a) as being unpatentable over Parry in view of Krebs and further in view of Jenkins et al (United States Patent No. 6,293,801, hereinafter "Jenkins"), rejected claim 32 under 35 U.S.C. 103(a) as being unpatentable over Parry in view of Krebs and further in view of Strub et al (United States Patent No. 6,652,287, hereinafter "Strub"), and rejected claims 35-36 and 44-46 under 35 U.S.C. 103(a) as being unpatentable over Parry in view of Krebs and further in view of Siefert (United States Patent No. 5,810,605, hereinafter "Siefert"). Accordingly, Applicant respectfully provides the following:

Claim Objection

In the Office Action, the Examiner objected to claim 34. Applicant respectfully submits that the amendments provided herein overcome the objection made by the Examiner.

Rejection under 35 U.S.C. § 101

In the Office Action, the Examiner rejected claim 6 under 35 U.S.C. 101, indicating that "the claimed invention is directed to non-statutory subject matter." Applicant respectfully submits that the amendments provided herein overcome the rejection made by the Examiner under 35 U.S.C. §101.

Rejections under 35 U.S.C. 103

The Examiner rejected claims 1-6, 8-10, 14-19, 22-23, 25, 27-29, 31, 33-43, 48, 50-52, 58-59 and 61-69 under 35 U.S.C. 103(a) as being unpatentable over Parry in view of Krebs, rejected claims 12, 53-55 and 57 under 35 U.S.C. 103(a) as being unpatentable over Parry in view of Krebs and further in view of Rukavina, rejected claims 24, 26, 60, and 70 under 35 U.S.C. 103(a) as being unpatentable over Parry in view of Krebs and further in view of Kershaw, rejected claims 30 and 49 under 35 U.S.C. 103(a) as being unpatentable over Parry in view of Krebs and further in view of Jenkins, rejected claim 32 under 35 U.S.C. 103(a) as being unpatentable over Parry in view of Krebs and further in view of Strub, and rejected claims 35-36 and 44-46 under 35 U.S.C. 103(a) as being unpatentable over Parry in view of Krebs and further in view of Krebs and further in view of Siefert. Applicant respectfully submits that the claim set as provided herein is not made obvious by the cited references.

The standard for a Section 103 rejection is set for in M.P.E.P 706.02(j), which provides:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations**. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

Applicant respectfully submits that the references cited by the Examiner do not teach or suggest all of the limitations claimed in the present invention. In particular, independent base claim 1 recites a method for providing a dynamic continual improvement educational environment for users, the method comprising: using a user interface and a design technique to design an adaptive educational path having a sequence of dynamic educational content for presentation to one or more users, wherein the design technique automatically produces computer readable instructions relating to the dynamic educational content, and wherein aspects of the educational content are associated in a relational order, the association capable of being maintained when an aspect of the educational content is moved; providing the adaptive educational path for presentation of at least a portion of the educational content to a particular user; obtaining and automatically analyzing learner performance data of the particular user, wherein the learner performance data is obtained and analyzed by a system to cause the system to automatically and adaptively sequence the dynamic educational content for the particular user based upon the learner performance data obtained and analyzed by the system, wherein the adaptive sequencing comprises modifying the presentation of the educational content to the particular user based upon the learner performance data, wherein the presentation to the particular user comprises the adaptive sequencing of the dynamic educational content for the particular user; and providing the adaptive educational path for iteratively presenting at least a portion of the presentation to the particular user over an extended period of time to maintain the particular user's understanding of the educational content. Such limitations are supported by the application as originally filed.

In contrast, references cited by the Examiner do not teach or suggest all of the limitations claimed in independent claim 1. For example, the cited references fail to teach or suggest

"providing the adaptive educational path for presentation of at least a portion of the educational content to a particular user; obtaining and automatically analyzing learner performance data of the particular user, wherein the learner performance data is obtained and analyzed by a system to cause the system to automatically and adaptively sequence the dynamic educational content for the particular user based upon the learner performance data obtained and analyzed by the system, wherein the adaptive sequencing comprises modifying the presentation of the educational content to the particular user based upon the learner performance data, wherein the presentation to the particular user comprises the adaptive sequencing of the dynamic educational content for the particular user". In fact, Krebs teaches displaying a structural element in response of an author command – not based upon learner performance data. (see col. 1, lines 62-67). Krebs also teaches that the graphical user interface may be configured to display a learning strategy window to indicate a selected strategy and to generate a navigation path window to display a suggested sequence of structural elements based on the selected learning strategy. (see col. 3, lines 4-8) Additionally, Krebs teaches of a navigation tree that is determined by applying a selected learning strategy, wherein the learning strategy is selected by the author - not the learner. (see col. 14, lines 30-64)

Accordingly, the cited claims do not teach or suggest all of the limitations claimed in independent claim 1 since the cited references do not teach or suggest: "providing the adaptive educational path for presentation of at least a portion of the educational content to a particular user; obtaining and automatically analyzing learner performance data of the particular user, wherein the learner performance data is obtained and analyzed by a system to cause the system to automatically and adaptively sequence the dynamic educational content for the particular user based upon the learner performance data obtained and analyzed by the system, wherein the

adaptive sequencing comprises modifying the presentation of the educational content to the particular user based upon the learner performance data, wherein the presentation to the particular user comprises the adaptive sequencing of the dynamic educational content for the particular user".

For at least this reason, Applicant respectfully submits that none of the references cited by the Examiner, alone or in combination, teaches or suggests all of the limitations of independent claim 1. And, since the references cited by the Examiner do not teach or suggest each and every limitation of independent claim 1, Applicant respectfully submits that the cited references do not make obvious independent claim 1 as provided herein. And, since the prior art references do not make obvious independent base claim 1, Applicant respectfully submits that the cited references do not make obvious the corresponding dependent claims that depend from independent base claim 1.

Independent base claim 50 recites a dynamic continual improvement educational system comprising: a computer system having a development module, an implementation module, an analysis module, and an output device, wherein the output device displays a user interface that enables a user to utilize a design technique for designing an adaptive educational path having a sequence of dynamic educational content for presentation to one or more users, wherein the design technique automatically produces computer readable instructions relating to the dynamic educational content; and the dynamic educational content designed for presentation to users, wherein the adaptive educational path includes structural components that are graphically associated in a relational order on the user interface, and wherein at least a portion of the dynamic educational content is adaptively sequenced for a particular user by obtaining and automatically analyzing learner performance data of the particular user, wherein the learner

performance data is obtained and analyzed by the computer system to cause the system to automatically and adaptively sequence the dynamic educational content for the particular user based upon the learner performance data obtained and analyzed by the system, wherein the adaptive sequencing comprises a modification to the educational content presentation based upon the learner performance data, the adaptive sequencing being ordered based upon a characteristic of the particular user and is iteratively presented to the particular user over an extended period of time to maintain the particular user's understanding of the educational content. Such limitations are supported by the application as originally filed.

In contrast, references cited by the Examiner do not teach or suggest all of the limitations of independent claim 50. For example, the cited references fail to teach or suggest "wherein at least a portion of the dynamic educational content is adaptively sequenced for a particular user by obtaining and automatically analyzing learner performance data of the particular user, wherein the learner performance data is obtained and analyzed by the computer system to cause the system to automatically and adaptively sequence the dynamic educational content for the particular user based upon the learner performance data obtained and analyzed by the system, wherein the adaptive sequencing comprises a modification to the educational content presentation based upon the learner performance data". As mentioned above, Krebs teaches displaying a structural element in response of an author command — not based upon learner performance data. (see col. 1, lines 62-67). Krebs also teaches that the graphical user interface may be configured to display a learning strategy window to indicate a selected strategy and to generate a navigation path window to display a suggested sequence of structural elements based on the selected learning strategy. (see col. 3, lines 4-8) Additionally, Krebs teaches of a

navigation tree that is determined by applying a selected learning strategy, wherein the learning strategy is selected by the author – not the learner. (see col. 14, lines 30-64)

Accordingly, the cited claims do not teach or suggest all of the limitations claimed in independent claim 50 since the cited references do not teach or suggest: "wherein at least a portion of the dynamic educational content is adaptively sequenced for a particular user by obtaining and automatically analyzing learner performance data of the particular user, wherein the learner performance data is obtained and analyzed by the computer system to cause the system to automatically and adaptively sequence the dynamic educational content for the particular user based upon the learner performance data obtained and analyzed by the system, wherein the adaptive sequencing comprises a modification to the educational content presentation based upon the learner performance data".

For at least this reason, Applicant respectfully submits that none of the references cited by the Examiner, alone or in combination, teaches or suggests all of the limitations of independent claim 50. And, since the references cited by the Examiner do not teach or suggest each and every limitation of independent claim 50, Applicant respectfully submits that the cited references do not make obvious independent claim 50 as provided herein. And, since the prior art references do not make obvious independent base claim 50, Applicant respectfully submits that the cited references do not make obvious the corresponding dependent claims that depend from independent base claim 50.

Independent base claim 58 recites a continual improvement educational process comprising: a development module for designing an adaptive educational path using a user interface and a design technique, wherein the design technique automatically produces computer readable instructions relating to the dynamic educational content without causing a designer to

encode the instructions; dynamic educational content for presentation to a user, wherein the adaptive educational path comprises a sequence of at least some of the dynamic educational content for presentation to the user, wherein aspects of the educational content are graphically associated in a relational order on the user interface, the association capable of being maintained when an aspect of the educational content is moved; an implementation module associated with the development module for selectively implementing the presentation of the educational content to the user, wherein the presentation is automatically adapted to a characteristic of the user, and for iteratively implementing at least a portion of the presentation to the user over an extended period of time to maintain the user's understanding of the educational content; and an analysis module associated with the implementation module for determining the learning pace of the user and the user's understanding of the educational content, the analysis module obtaining and automatically analyzing learner performance data of the user, wherein the learner performance data is obtained and analyzed by the analysis module to cause the analysis module to automatically and adaptively sequence the dynamic educational content for the user based upon the learner performance data obtained and analyzed by the analysis module, wherein the adaptive sequencing comprises modifying presentation of the educational content to the user based upon the learner performance data. Such limitations are supported by the application as originally filed.

In contrast, references cited by the Examiner do not teach or suggest all of the limitations of independent claim 58. For example, the cited references fail to teach or suggest "an implementation module associated with the development module for selectively implementing the presentation of the educational content to the user, wherein the presentation is automatically adapted to a characteristic of the user, and for iteratively implementing at least a portion of the

presentation to the user over an extended period of time to maintain the user's understanding of the educational content; and an analysis module associated with the implementation module for determining the learning pace of the user and the user's understanding of the educational content, the analysis module obtaining and automatically analyzing learner performance data of the user, wherein the learner performance data is obtained and analyzed by the analysis module to cause the analysis module to automatically and adaptively sequence the dynamic educational content for the user based upon the learner performance data obtained and analyzed by the analysis module, wherein the adaptive sequencing comprises modifying presentation of the educational content to the user based upon the learner performance data." As mentioned above, Krebs teaches displaying a structural element in response of an author command - not based upon learner performance data. (see col. 1, lines 62-67). Krebs also teaches that the graphical user interface may be configured to display a learning strategy window to indicate a selected strategy and to generate a navigation path window to display a suggested sequence of structural elements based on the selected learning strategy. (see col. 3, lines 4-8) Additionally, Krebs teaches of a navigation tree that is determined by applying a selected learning strategy, wherein the learning strategy is selected by the author – not the learner. (see col. 14, lines 30-64)

Accordingly, the cited claims do not teach or suggest all of the limitations claimed in independent claim 58 since the cited references do not teach or suggest: "an implementation module associated with the development module for selectively implementing the presentation of the educational content to the user, wherein the presentation is automatically adapted to a characteristic of the user, and for iteratively implementing at least a portion of the presentation to the user over an extended period of time to maintain the user's understanding of the educational content; and an analysis module associated with the implementation module for determining the

learning pace of the user and the user's understanding of the educational content, the analysis module obtaining and automatically analyzing learner performance data of the user, wherein the learner performance data is obtained and analyzed by the analysis module to cause the analysis module to automatically and adaptively sequence the dynamic educational content for the user based upon the learner performance data obtained and analyzed by the analysis module, wherein the adaptive sequencing comprises modifying presentation of the educational content to the user based upon the learner performance data."

For at least this reason, Applicant respectfully submits that none of the references cited by the Examiner, alone or in combination, teaches or suggests all of the limitations of independent claim 58. And, since the references cited by the Examiner do not teach or suggest each and every limitation of independent claim 58, Applicant respectfully submits that the cited references do not make obvious independent claim 58 as provided herein. And, since the prior art references do not make obvious independent base claim 58, Applicant respectfully submits that the cited references do not make obvious the corresponding dependent claims that depend from independent base claim 58.

Independent base claim 61 recites a computer program product for implementing within a computer system a method for providing a dynamic continual improvement educational environment, the computer program product comprising: a computer readable medium encoded with computer executable code utilized to implement the method, the method comprising: receiving input through a design technique to display an adaptive educational path on a user interface, the adaptive educational path having a sequence of dynamic educational content for presentation to a user, wherein the design technique automatically produces computer readable instructions relating to the dynamic educational content, and wherein aspects of the educational

content are associated in a relational order, the association capable of being maintained when an aspect of the educational content is moved; obtaining and automatically analyzing learner performance data of the user, wherein the learner performance data is obtained and analyzed by the system to cause the system to automatically and adaptively sequence the dynamic educational content for the user based upon the learner performance data obtained and analyzed by the system, wherein the adaptive sequencing comprises modifying the presentation of the educational content to the user based upon the learner performance data; displaying the adaptively sequenced presentation of the educational content on an output device to the user, wherein the presentation is automatically adapted to a characteristic of the user; and iteratively implementing at least a portion of the presentation to the user over an extended period of time to maintain the user's understanding of the educational content. Such limitations are supported by the application as originally filed.

In contrast, references cited by the Examiner do not teach or suggest all of the limitations of independent claim 61. For example, the cited references fail to teach or suggest "obtaining and automatically analyzing learner performance data of the user, wherein the learner performance data is obtained and analyzed by the system to cause the system to automatically and adaptively sequence the dynamic educational content for the user based upon the learner performance data obtained and analyzed by the system, wherein the adaptive sequencing comprises modifying the presentation of the educational content to the user based upon the learner performance data; displaying the adaptively sequenced presentation of the educational content on an output device to the user". As mentioned above, Krebs teaches displaying a structural element in response of an author command – not based upon learner performance data. (see col. 1, lines 62-67). Krebs also teaches that the graphical user interface may be configured

to display a learning strategy window to indicate a selected strategy and to generate a navigation path window to display a suggested sequence of structural elements based on the selected learning strategy. (see col. 3, lines 4-8) Additionally, Krebs teaches of a navigation tree that is determined by applying a selected learning strategy, wherein the learning strategy is selected by the author – not the learner. (see col. 14, lines 30-64)

Accordingly, the cited claims do not teach or suggest all of the limitations claimed in independent claim 61 since the cited references do not teach or suggest: "obtaining and automatically analyzing learner performance data of the user, wherein the learner performance data is obtained and analyzed by the system to cause the system to automatically and adaptively sequence the dynamic educational content for the user based upon the learner performance data obtained and analyzed by the system, wherein the adaptive sequencing comprises modifying the presentation of the educational content to the user based upon the learner performance data; displaying the adaptively sequenced presentation of the educational content on an output device to the user".

For at least this reason, Applicant respectfully submits that none of the references cited by the Examiner, alone or in combination, teaches or suggests all of the limitations of independent claim 61. And, since the references cited by the Examiner do not teach or suggest each and every limitation of independent claim 61, Applicant respectfully submits that the cited references do not make obvious independent claim 61 as provided herein. And, since the prior art references do not make obvious independent base claim 61, Applicant respectfully submits that the cited references do not make obvious the corresponding dependent claims that depend from independent base claim 61.

Thus, Applicant respectfully submits that for at least the reasons provided herein, the claim set as provided herein overcomes all rejections made by the Examiner in the Office Action.

CONCLUSION

Applicant submits that the amendments made herein do not add new matter and that the claims are now in condition for allowance. Accordingly, Applicant requests favorable reconsideration. If the Examiner has any questions or concerns regarding this communication, the Examiner is invited to call the undersigned.

DATED this $19^{4/4}$ day of October, 2007.

Respectfully submitted, ,

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